

EPI Update for Friday, March 18, 2016

Center for Acute Disease Epidemiology (CADE)

Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Lead in Iowa water concerns**
- **Fruit and fruit juice consumption in children**
- **Happy 20th birthday, PulseNet!**
- **Celebrate Easter safely**
- **Meeting announcements and training opportunities**

Lead in Iowa water concerns

Media coverage of the Flint Michigan public water supply lead contamination, and other reports of lead exposures, have raised concerns about the safety of Iowa's drinking water. At this time, IDPH's Lead Program is not aware of any instances where public drinking water is the major source of lead exposure for any reported child or adult with elevated blood lead level. The most likely source of a child's lead exposure in Iowa is household dust contaminated with lead from paint in a home built prior to 1978. For adults the most likely source of lead exposure is inhalation from a manufacturing worksite (such as working with batteries or other lead products) or hobby involving lead products.

Municipal or public water sources are periodically tested for lead as required by the Lead and Copper Rule (part of the Safe Drinking Water Act). Private well water sources should be tested by users to establish a baseline and then periodically tested based on risk factors. For more information on lead in drinking water and home water testing, visit; www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water, or www.epa.gov/sites/production/files/2015-11/documents/2005_09_14_faq_fs_homewatertesting.pdf, or idph.iowa.gov/lpp. Private drinking water testing for lead is available for \$20 through the State Hygienic Laboratory in Ankeny (800-421-4692).

Fruit and fruit juice consumption in children

Daily consumption of fruits is an important, but sometimes challenging, way for children of all ages to get their recommended fiber as well as vitamins and nutrients. Many young children, however, rely on fruit juice as their main source of fruit. While 100% fruit juice does have the vitamins and nutrients contained in fruit, it does not have the fiber. Additionally, products such as "fruit drinks" and "fruit juice cocktails", which can be confused with fruit juice, are filled with added sweeteners. "100% fruit juice" can count towards the recommended daily amounts of fruit, however the American Academy of Pediatrics (AAP) recommends that it is not introduced into a child's diet until at least 6 months of age, and that it be consumed in one sitting rather than sipped on from a cup or bottle throughout the day in order to develop healthy eating habits as well as reduces the chance of developing cavities.

Parents may find it challenging to feed their children the recommended amount of fruit per day, and studies show that only 40% of children meet the following recommendations:

- 1) 1 cup for children ages 2-3 years;
- 2) 1 - ½ cups for 4 - 8 year olds;
- 3) 1 ½ cups for 9 - 18 year old girls and 9 - 13 year old boys;
- 4) 2 cups for 14 - 18 year old boys.

Pre-washed and cut fruit, stored in baggies in the fridge, make easy and healthy after-school snacks. Fruit cups (in 100% natural juice) or applesauce cups are easy to pack in lunches. The AAP recommends that toddlers and young children limit fruit juice to 4 to 6 ounces of juice per day. Older children and adolescents should limit fruit juice to 8 to 12 ounces of juice per day. The rest of the fruit requirement should come from fiber-filled whole fruit. Additionally, programs like WIC (Women, Infants, and Children) and SNAP (Supplemental Nutrition Assistance Program) allow for the purchase of fresh fruit, which should help defray the cost for those in need. For more information, visit www.choosemyplate.gov/fruit.

Happy 20th birthday, PulseNet!

Since it started in 1996 PulseNet (a network of public health laboratories), prevents an estimated 270,000 cases of food poisoning and saves half a billion dollars every year. In comparison, the network costs public health agencies about \$7 million dollars a year to run.

PulseNet connects cases of foodborne illness by comparing DNA fingerprints of the foodborne bacteria and matching illnesses across the country that may be due to the same food consumption. This information entered in to the PulseNet database by labs across the country, and can be accessed by local and state health officials. By matching cases of illness caused by the same exact bacteria, public health investigators can work quickly to find the source of the illness, recall contaminated food, and prevent more illnesses.

PulseNet has revolutionized how foodborne disease outbreaks are detected and investigated. Before PulseNet, foodborne disease outbreaks often went undetected or were discovered only after a large number of people had become ill. Using PulseNet methods, scientists can now find outbreaks (and the associated contaminated food) even if only a few people are sick and they live in different parts of the country. For more on PulseNet visit, www.cdc.gov/media/dpk/2016/dpk-pulsenet.html

Celebrate Easter safely

The Easter season is associated with many traditions and events, including chicks and ducklings, brightly colored eggs and Easter egg hunts. And while baby chicks and ducklings are adorable and children want to handle them, these young birds often carry harmful bacteria such as *Salmonella* (they are carried in the bird's intestine, can contaminate the bird's environment and the entire surface of the bird). Children are exposed to these bacteria by simply holding or cuddling the bird, or by contact with bird

enclosures or nesting material. Young children are at increased risk for serious *Salmonella* infection.

Also, during Easter and spring celebrations there is a risk of unsafe egg handling. When dealing with hard boiled eggs and egg hunts, here are safety tips to keep everyone healthy:

- Use one set of eggs for decorating and hunting, and another for eating. To be extra safe, use plastic eggs for outdoor egg hunts.
- Wash your hands with soap and water before and after handling raw eggs or cooked eggs that will be eaten.
- When preparing hard-boiled eggs, be on the lookout for cracks in the shells. Even tiny cracks can allow bacteria to contaminate the egg; throw away any eggs that have any cracks whatsoever.
- Keep hard-boiled eggs intended for eating in the refrigerator until the last possible minute; hard-boiled eggs should not remain unrefrigerated for more than two hours, and hard-boiled eggs should be eaten within seven days of cooking.

To learn more about reducing the risk of *Salmonella* from eggs, visit www.cdc.gov/features/salmonellaeggs/

Meeting announcements and training opportunities

None

Have a healthy and happy (and greener) week!

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